

LISTING OF CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:
Please amend the claims as follows:

1. (Currently Amended) A platen for use in chemical mechanical planarization (CMP) systems, comprising:

a platen plate having at least one recess defined therein, the at least one recess having an input port formed therein; and

a porous material disposed in the at least one recess, the porous material having a porosity sufficient to restrict air flow therethrough ~~so as to reduce an amount of air required for a CMP operation,~~ the platen plate having the porous material being configured for positioning proximate to a surface of a polishing pad during a CMP operation.

2. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 1, wherein the porous material is comprised of one of a ceramic material, an aluminum-based material, stainless steel, a nickel-based material, and a titanium-based material.

3. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 1, wherein the porous material has a pore size of between about 10 microns and about 100 microns.

4. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 1, wherein the porous material has a pore size of between about 25 microns and about 45 microns.

5. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 1, wherein the recess defined in the platen has an annular shape.

6. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 5, wherein the porous material has an annular shape that is configured to be received in the annular shaped recess.

7. (Currently Amended) A platen for use in chemical mechanical planarization (CMP) systems, comprising:

a platen plate having at least one recess defined therein, the at least one recess having an input port formed therein, wherein the at least one recess includes a single recess defined in a central region of the platen plate or one of a plurality of recesses is defined in a peripheral region of the platen plate; and

a porous material disposed in the at least one recess, the porous material having a porosity sufficient to restrict air flow therethrough ~~so as to reduce an amount of air required for a CMP operation, the platen plate having the porous material being configured for positioning proximate to a surface of a polishing pad during a CMP operation.~~

8. (Previously Presented) A platen for use in chemical mechanical planarization (CMP) systems, comprising:

a platen plate having at least one recess defined therein, the at least one recess having an input port formed therein, wherein a plurality of recesses is defined in a peripheral region of the platen plate, the plurality of recesses including six recesses, each of the six recesses having an input port formed therein; and

a porous material disposed in the at least one recess, the porous material having a porosity sufficient to restrict air flow therethrough so as to reduce an amount of air required for a CMP operation.

9. (Original) A platen for use in chemical mechanical planarization (CMP) systems, comprising:

a platen plate having a recess defined in a central region of the platen plate and a plurality of recesses defined in a peripheral region of the platen plate, the recess in the central region and

each of the plurality of recesses defined in the peripheral region having an input port therein, the recess defined in the central region and each of the plurality of recesses defined in the peripheral region having an annular shape; and

a plurality of annular sections, one of the annular sections being disposed in the recess defined in the central region of the platen plate and the other of the annular sections being disposed in the plurality of recesses defined in the peripheral region of the platen plate, each of the plurality of annular sections being comprised of porous material having a porosity sufficient to restrict air flow therethrough so as to reduce an amount of air required for a CMP operation.

10. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 9, further comprising:

a mounting plate coupled to a bottom portion of the platen plate, the mounting plate being configured to transport air from an air input at a bottom portion of the mounting plate to an input port in the recess defined in the central region and to an input port in each of the plurality of recesses defined in the peripheral region.

11. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 9, wherein the porous material is comprised of one of a ceramic material, an aluminum-based material, a nickel-based material, stainless steel, and a titanium-based material.

12. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 9, wherein the porous material has a pore size of between about 10 microns and about 100 microns.

13. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 9, wherein the porous material has a pore size of between about 25 microns and about 45 microns.

14. (Original) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 9, wherein the plurality of recesses in the peripheral region of the platen plate includes six recesses, each of the six recesses having an input port.

Claims 15-20 (canceled)

21. (Currently Amended) A platen for use in chemical mechanical planarization (CMP) systems, comprising:

a platen plate having at least one recess defined therein, the at least one recess having an input port formed therein; and

a porous material disposed in the at least one recess, the porous material having a porosity sufficient to restrict air flow therethrough ~~so as to reduce an amount of air, the platen plate having the porous material being configured for positioning proximate to a surface of a polishing pad during a CMP operation.~~

22. (Previously Presented) A platen for use in chemical mechanical planarization (CMP) systems, comprising:

a platen plate having at least one recess defined therein, the at least one recess having an input port formed therein;

a porous material disposed in the at least one recess;

a single recess defined in a near central region of the platen plate; and

a plurality of recesses defined in a peripheral region of the platen plate.

Claims 23-24 (canceled)

25. (Previously Presented) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 7, wherein the porous material is comprised of one of a ceramic

material, an aluminum-based material, stainless steel, a nickel-based material, and a titanium-based material.

26. (Previously Presented) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 7, wherein the porous material has a pore size of between about 10 microns and about 100 microns.

27. (Previously Presented) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 7, wherein the porous material has a pore size of between about 25 microns and about 45 microns.

28. (Previously Presented) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 7, wherein the recess defined in the platen has an annular shape.

29. (Previously Presented) A platen for use in chemical mechanical planarization (CMP) systems as recited in claim 28, wherein the porous material has an annular shape that is configured to be received in the annular shaped recess.